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33647	7590	08/05/2004	EXAMINER	
ZIOLKOWSKI PATENT SOLUTIONS GROUP, LLC (ITW)			JAGAN, MIRELLYS	
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MEQUON, WI 53097			ART UNIT	PAPER NUMBER
			2859	

DATE MAILED: 08/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/682,843	Applicant(s) DESAI ET AL.	
	Examiner Mirellys Jagan	Art Unit 2859	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 and 26-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 32 is/are allowed.
- 6) ☒ Claim(s) 1, 3, 4, 7-9, 16-24, 26 and 31 is/are rejected.
- 7) ☒ Claim(s) 2, 5, 6, 10-15 and 27-30 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Objections*

1. Claims 2-6, 10-15, 22-24, and 26-30 are objected to because of the following informalities:

In claim 2, there is lack of antecedent basis in the specification for the housing having one annular ring, as stated by “at least one” ring in line 3. The specification and figures disclose that there are at least two rings.

In claim 3, there is lack of antecedent basis in the specification for the housing having one resistance mechanism for one stick, as stated by a resistance mechanism for “at least one” stick in line 2. The specification and figures disclose that there are two resistance mechanisms, one for each stick.

In claim 5, it is not clear how “each of the pair of extension mechanisms” comprises more than one collet, as stated by the phrase “at least one collet” in lines 2-3.

In claim 6, there is lack of antecedent basis in the specification for the only one of the sticks having a ridge, as stated by “at least one” stick in line 2. The specification and figures disclose that both sticks have a ridge.

In claim 10, there is lack of antecedent basis in the specification for the housing having one annular ring, as stated by “at least one” ring in line 4. As claimed, claim 10 appears to state that the pair of collets is coupled to one ring. The specification and figures disclose that there are at least two rings.

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In claim 28, there is lack of antecedent basis in the specification for the housing having one annular lip, as stated by "at least one" lip in line 9. As claimed, claim 10 appears to state that the pair of collets is coupled to one lip. The specification and figures disclose that there are at least two lips.

In claim 29, there is lack of antecedent basis in the specification for the connector having one collet, as stated by "at least one" collet in line 9. The specification and figures disclose that there are two collets.

In claim 30, there is lack of antecedent basis in the specification for the only one of the sticks having a ridge, as stated by "at least one" stick in line 8. The specification and figures disclose that both sticks have a ridge.

Claims 4, 11-15, 23, 24, and 26-30 are objected to for being dependent on an objected base claim. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3, 4, 7-9, 16-24, 26, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over the publication titled "OMEGAMARKER<sup>®</sup> Temperature Test Kit" by OMEGA<sup>®</sup> [hereinafter OMEGA<sup>®</sup>] in view of U.S. Patent 2,785,654 to Lundberg, Sr. et al [hereinafter Lundberg] and U.S. Patent 1,603,713 to Peterson.

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Referring to claims 1, 3, 4, 7-9, OMEGA<sup>®</sup> discloses a temperature indicator stick assembly comprising:

a first temperature indicating stick comprised of a compound that melts at a first temperature;

a second indicator stick comprised of a second component that melts at a second temperature;

a stick holder for each stick, the holders each receiving a stick therein and used for manually holding each stick.

OMEGA<sup>®</sup> does not disclose the holders comprising a connector that connects a first and a second stick in a single assembly, such that the first and second sticks are independently operable and moveable with respect to each other and the connector; the connector having a pair of extension mechanisms extending from the connector and constructed to independently advance each of the sticks upon rotation of respective mechanisms; and a plurality of flanges that limit rotational movement of at least one of the sticks about an axis; the connector comprising a first element and a second element each having a marking end and a union end; wherein the union ends thread together, and wherein the connector prevents contact between the sticks.

Lundberg discloses a dual holder for holding two sticks (crayons), the holder comprising a connector ring (14) that connects a first (10) and a second (12) stick holder in a single assembly, such that the first and second sticks in each of the holders are independently operable. The connector (14) connects the union ends of the holders, wherein the union ends are held together by being frictionally inserted into the connector. Lundberg teaches that it is useful to

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hold two stick holders in a double-ended manner in order to allow a user to have two different types of sticks readily available (see figure 2; column 1, line 52-57; and column 2, lines 20-35).

Peterson discloses a holder (1) for holding a stick (crayon). The holder houses the stick so that the stick is operable and moveable with respect to the holders. The holder has a marking end having a resistance mechanism formed by an annular ring formed by a plurality of flanges (3) extending from the holder to engage and grip the stick therein and align the stick along an axis (the gripping of the stick therein can limit the rotational movement of the stick about the axis). The holder also has an extension mechanism (5) extending therefrom to advance the stick upon rotation of the extension mechanism. The extension mechanism is a collet having threads that rotatably couple to threads on the annular ring formed by the plurality of flanges, the collet allowing the stick to advance from the holder upon its rotation. Peterson teaches that it is useful to use such a resistance and extension mechanism on the holder since it allows the stick to be stored when not in use and provides even pressure around the stick when it is extended to prevent it from breaking during use (see figure 1; page 2, lines 58-68).

Referring to claim 1, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the assembly disclosed by OMEGA<sup>®</sup> by adding a connector for connecting two of the stick holders together to form a dual stick holder, as taught by Lundberg, in order to reduce the size of the assembly by reducing the number of individual sticks in the assembly and allow a user to have two different desired types of sticks readily available for use.

Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the holders disclosed by OMEGA<sup>®</sup> by adding a resistance

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and extension mechanism to the holders, as taught by Peterson, in order to allow the sticks to be stored in the holder when not in use and prevent the sticks from breaking during use.

Lastly, the assembly disclosed by OMEGA<sup>®</sup>, Lundberg, and Peterson forms a resulting housing (connector) of a single structure having the claimed structural limitations such that the sticks are independently operable and independently moveable with respect to each other and the resulting housing, and the housing prevents contact between the sticks.

Referring to claim 8, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the assembly disclosed by OMEGA<sup>®</sup>, Lundberg, and Peterson by threading the union ends of the holders to the connector ring in order to more securely connect the elements to each other.

Referring to claims 16-21, OMEGA<sup>®</sup> discloses a temperature indicator stick apparatus comprising:

- a first temperature indicator stick for indicating a first temperature when in direct contact with a heated surface by leaving a portion of itself thereon;

- a second temperature indicator stick for indicating a second temperature when in direct contact with a heated surface by leaving a portion of itself thereon; and

- stick holders each retaining one stick therein.

OMEGA<sup>®</sup> does not disclose the apparatus comprising a connector for replaceably retaining the first stick to the second stick to form a single indicator stick; means for advancing the first indicating means; means for advancing the second indicating means; means for aligning the first and second means along an axis; means for resisting rotational movement of the first and

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second means about an axis; wherein rotation of a respective advancing means extends a corresponding indicating means from the connector, and the advancement means controls extension and retraction of the first and second means.

Lundberg discloses a dual holder for holding two sticks (crayons), the holder having means for replaceably retaining the two sticks together to form a single stick. The retaining means comprises a connector (14). The connector connects a first (10) and a second (12) stick holder in a single assembly, such that the first and second sticks in each of the holders are independently operable. The connector (14) connects the union ends of the holders, wherein the union ends are held together by being frictionally inserted into the connector. Lundberg teaches that it is useful to hold two stick holders in a double-ended manner using a connector ring in order to allow a user to have two different types of sticks readily available for use (see figure 2; column 1, line 52-57; and column 2, lines 20-35).

Peterson discloses a holder (1) for holding a stick (crayon). The holder houses the stick so that the stick is operable and moveable with respect to the holder. The holder has a marking end having means for aligning the stick and resisting rotational movement about an axis, the means comprising a resistance mechanism formed by an annular ring formed by a plurality of flanges (3) extending from the holder to engage and grip the stick therein and align the stick along an axis (the gripping of the stick therein can limit the rotational movement of the stick about the axis). The holder also has a means for advancing the stick, the means comprising an extension mechanism (5) extending therefrom to advance the stick upon rotation of the extension mechanism. The extension mechanism is a collet having threads that rotatably couple to threads on the annular ring formed by the plurality of flanges, the collet allowing the stick to advance



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from the holder upon its rotation. Peterson teaches that it is useful to use such a resistance and extension mechanism on the holder since it allows the stick to be stored when not in use, and provides even pressure around the stick when it is extended to prevent it from breaking during use (see figure 1; page 2, lines 58-68).

Referring to claim 16, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the assembly disclosed by OMEGA<sup>®</sup> by adding a connector for connecting two of the stick holders together to form a dual stick holder, as taught by Lundberg, in order to reduce the size of the assembly by reducing the number of individual sticks in the assembly and allow a user to have two different desired types of crayons readily available during use.

Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the holders disclosed by OMEGA<sup>®</sup> by adding a resistance and extension mechanism to the holders, as taught by Peterson, in order to allow the sticks to be stored when not in use and prevent the sticks from breaking during use.

Lastly, the assembly disclosed by OMEGA<sup>®</sup>, Lundberg, and Peterson forms a resulting housing (connector) of a single structure having the claimed structural limitations such that the sticks are independently operable and independently moveable along a single axis with respect to each other and the resulting housing.

Referring to claims 22-24 and 26, OMEGA<sup>®</sup> discloses a temperature indicator stick assembly comprising:

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a first temperature indicating stick comprised of a compound that melts at a first temperature;

a second indicator stick comprised of a second component that melts at a second temperature;

a stick holder for each stick, the holders each receiving a stick therein and used for manually holding each stick.

OMEGA<sup>®</sup> does not disclose the sticks being connected in a single assembly to permit movement of the first stick independently of the second stick; first and second extension mechanisms connected to the assembly and constructed to extend the first and the second sticks from the assembly upon rotation of the respective rotation mechanism; and aligning the sticks along an axis; and preventing rotational movement of the sticks about an axis; and the single assembly having two threaded members connected thereto to engage the sticks.

Lundberg discloses a dual holder for holding two sticks (crayons), the holder comprising a connector ring (14) that connects a first (10) and a second (12) stick holders in a single assembly, such that the first and second sticks in each of the holders are independently operable. The connector (14) connects the union ends of the holders, wherein the union ends are held together by being frictionally inserted into the connector. Lundberg teaches that it is useful to hold two stick holders in a double-ended manner in order to allow a user to have two different types of sticks readily available during use (see figure 2; column 1, line 52-57; and column 2, lines 20-35).

Peterson discloses a holder (1) for holding a stick (crayon). The holder houses the stick so that the stick is operable and moveable with respect to the holder. The holder has a marking end

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having a resistance mechanism formed by an annular ring formed by a plurality of flanges (3) extending from the holder to engage and grip the stick therein and align the stick along an axis (the gripping of the stick therein can limit the rotational movement of the stick about the axis). The holder also has an extension mechanism (5) extending therefrom to advance the stick upon rotation of the extension mechanism. The extension mechanism is a collet having threads that rotatably couple to threads on the annular ring formed by the plurality of flanges, the collet allowing the stick to advance from the holder upon its rotation. Peterson teaches that it is useful to use such a resistance and extension mechanism on the holder since it allows the stick to be stored when not in use and provides even pressure around the stick when it is extended to prevent it from breaking during use (see figure 1; page 2, lines 58-68).

Referring to claim 22, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the assembly disclosed by OMEGA<sup>®</sup> by adding a connector for connecting two of the stick holders together to form a dual stick holder, as taught by Lundberg, in order to reduce the size of the assembly by reducing the number of individual sticks in the assembly and allow a user to have two different desired types of crayons readily available during use.

Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the holders disclosed by OMEGA<sup>®</sup> by adding a resistance and extension mechanism to the holders, as taught by Peterson, in order to allow the sticks to be stored when not in use and prevent the sticks from breaking during use.

Lastly, the assembly disclosed by OMEGA<sup>®</sup>, Lundberg, and Peterson forms a resulting housing (connector) of a single structure having the claimed structural limitations such that the

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sticks are independently operable and independently moveable with respect to each other and the resulting housing along the same axis. Therefore, in providing the assembly disclosed by OMEGA<sup>®</sup>, Lundberg, and Peterson above, the method steps of claims 22-24 and 26 will naturally be followed.

Referring to claim 31, OMEGA<sup>®</sup> discloses a temperature indicator stick assembly comprising:

a first temperature indicating stick comprised of a compound that melts at a first temperature;

a second indicator stick comprised of a second component that melts at a second temperature;

a stick holder for each stick, the holders each having a marking end and a union end, and receiving a stick therein and used for manually holding each stick, wherein each union end extends beyond an end of a respective stick housed therein.

OMEGA<sup>®</sup> does not disclose the assembly having a connector connecting the sticks in a single assembly, the connector comprising a first element and a second element, wherein the union ends of the elements thread together and extend beyond an end of a respective stick; and each marking end has an extension member connected thereto and constructed to extend and retract a respective stick housed therein upon rotation relative thereto.

Lundberg discloses a dual holder for holding two sticks (crayons), the holder comprising a connector ring (14) that connects a first (10) and a second (12) stick holder in a single assembly, such that the first and second sticks in each of the holders are independently operable.

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The connector (14) connects the union ends of the holders, wherein the union ends are held together by being frictionally inserted into the connector. Lundberg teaches that it is useful to hold two stick holders in a double-ended manner in order to allow a user to have two different types of crayons readily available during use (see figure 2; column 1, line 52-57; and column 2, lines 20-35).

Peterson discloses a holder (1) for holding a stick (crayon). The holder houses the stick so that the stick is operable and moveable with respect to the holder. The holder has a marking end having a resistance mechanism formed by an annular ring formed by a plurality of flanges (3) extending from the holder to engage and grip the stick therein and align the stick along an axis (the gripping of the stick therein can limit the rotational movement of the stick about the axis). The holder also has an extension mechanism (5) extending therefrom to advance the stick upon rotation of the extension mechanism. The extension mechanism is a collet having threads that rotatably couple to threads on the annular ring formed by the plurality of flanges, the collet allowing the stick to advance from the holder upon its rotation. Peterson teaches that it is useful to use such a resistance and extension mechanism on the holder since it allows the stick to be stored when not in use and provides even pressure around the stick when it is extended to prevent it from breaking during use (see figure 1; page 2, lines 58-68).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the assembly disclosed by OMEGA<sup>®</sup> by adding a connector for connecting two of the stick holders together to form a dual stick holder, as taught by Lundberg, in order to reduce the size of the assembly by reducing the number of individual sticks in the

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assembly and allow a user to have two different desired types of crayons readily available during use.

Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the holders disclosed by OMEGA<sup>®</sup> by adding a resistance and extension mechanism to the holders, as taught by Peterson, in order to allow the sticks to be stored when not in use and prevent the sticks from breaking during use.

Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the assembly disclosed by OMEGA<sup>®</sup>, Lundberg, and Peterson by threading the union ends of the holders to the connector ring in order to more securely connect the elements to each other.

Lastly, the assembly disclosed by OMEGA<sup>®</sup>, Lundberg, and Peterson forms a resulting housing (connector) of a single structure having the claimed structural limitations, i.e., forming a single assembly of a connector having a first element and a second element, wherein the union ends of the elements thread together and extend beyond an end of a respective stick; and each marking end has an extension member connected thereto and constructed to extend and retract a respective stick housed therein upon rotation relative thereto.

***Allowable Subject Matter***

4. Claim 32 is allowed.
5. Claims 10-15 and 28-30 would be allowable if rewritten and amended to overcome the objections set forth in this Office action.

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6. Claims 2, 5, 6, and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, and amended to overcome the objections set forth in this Office action.

7. The examiner's statement of reasons for the indication of allowable subject matter can be found in the Office action mailed 3/03/04.

***Response to Arguments***

8. Applicant's arguments that the objections to claims 10-15 are not appropriate because the claims meet the best mode and enablement requirements outlined in 35 U.S.C. 112 (1st paragraph) are not persuasive since the Examiner has only objected to these claims, and has not rejected the claims under 35 U.S.C. 112, 1<sup>st</sup> paragraph as failing to comply with the best mode and enablement requirements. Furthermore, Applicant's arguments that the objections to claims 10-15 are not appropriate because the Examiner "seems to be applying 35 U.S.C. 112, 2<sup>nd</sup> paragraph, in comparing the claims to the specification" are not persuasive since 35 U.S.C. 112, 2<sup>nd</sup> paragraph requires sufficient antecedent basis for limitations in the claim, not the specification, and since the Examiner has only objected to these claims and has not rejected these claims under 35 U.S.C. 112, 2<sup>nd</sup> paragraph.

9. Applicant's arguments with respect to the rejection of claims 1-24 and 26-32 over the prior art have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents and publication disclose holders for writing means:

U.S. Patent 4,468,146 to Tabachnik

U.S. Patent 1,983,728 to Bafetti

U.S. Patent 2,656,605 to Schlieder

U.S. Patent 6,113,520 to Greiner

U.S. Patent Application Publication 2002/0032069 to Arrison

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.



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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mirellys Jagan whose telephone number is 703-305-0930. The examiner can normally be reached on Monday-Thursday from 8AM to 4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on 703-308-3875. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJ  
July 30, 2004



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